

AD-A145 597

MANUFACTURING METHODS AND TECHNOLOGY (MM&T)
SPECIFICATIONS FOR MINIATURE CATHODE RAY TUBE(U) THOMAS
ELECTRONICS INC WAYNE NJ F M BRUNO 30 JUL 84

1/1

UNCLASSIFIED

TEI-A009-15 DAAK70-80-C-0168

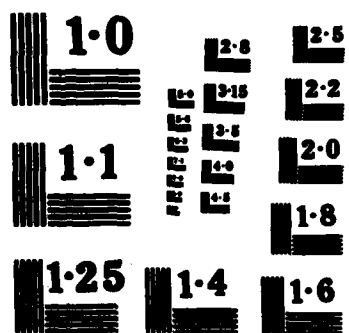
F/G 9/1

NL

END

FILED

8710



2

TEI A009-15

DAAK70-80-C-0168

30 July 1984

Thomas Electronics, Inc.
100 Riverview Drive
Wayne, N.J. 07470

AD-A145 597

FIFTEENTH QUARTERLY REPORT

for period

1 April 1984 - 30 June 1984

Approved for public release; distribution unlimited

Manufacturing Methods and Technology (MM&T) Specifications for Miniature Cathode Ray Tube

prepared by

F.M. Bruno

Thomas Electronics, Inc.
100 Riverview Drive
Wayne, NJ 07470

prepared for

Procurement and Production Directorate
USA MERADCOM
Fort Belvoir, VA 22060

DTIC FILE COPY

DTIC
ELECTE
SEP 17 1984
S
E
D

THOMAS ELECTRONICS, INC.

100 Riverview Drive, Wayne, New Jersey 07470 / 201-696-5200 / TWX: 710-988-5836 / Cable: TOMTRONICS

84. 09 14 030

DISCLAIMER

The findings in this report are not to be construed as an official Department of the Army position unless so designated by other authorized documents.

DISPOSITION

Destroy this report when it is no longer needed. Do not return it to the originator.

ACKNOWLEDGEMENT

This project has been accomplished as part of the US Army Manufacturing Methods and Technology (MM&T) Program which has as its objective the timely establishment of manufacturing processes, techniques, or equipment to insure the efficient production of current or future defense programs.

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER TEI A009-15	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) MANUFACTURING METHODS AND TECHNOLOGY (MM&T) SPECIFICATIONS FOR MINIATURE CATHODE RAY TUBE		5. TYPE OF REPORT & PERIOD COVERED Fifteenth Quarterly Report 1 Apr 84 - 30 Jun 84
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) F. M. Bruno		8. CONTRACT OR GRANT NUMBER(s) DAAK70-80-C-0168
9. PERFORMING ORGANIZATION NAME AND ADDRESS Thomas Electronics, Inc. 100 Riverview Drive Wayne, N.J. 07470		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS Procurement and Production Directorate USA MERADCOM Fort Belvoir, VA 22060		12. REPORT DATE 30 July 1984
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		13. NUMBER OF PAGES
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Miniature cathode ray tube		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) For Phase II - Confirmatory Samples the final report on all Environmental tests except Electromagnetic Interference (EMI) was transmitted to the PCO. The EMI preliminary report was being reviewed by the COR. Accelerated life-testing (Reliability) continues.		

SECURITY CLASSIFICATION OF THIS PAGE/When Data Entered

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

Manufacturing Methods and Technology (MM&T) Specifications for
Miniature Cathode Ray Tube

FIFTEENTH QUARTERLY REPORT


for period

1 April 1984 - 30 June 1984

The object of this study is to develop design, performance,
and test specifications for the Miniature Cathode Ray Tube
(CRT) assembly suitable for use in the Integrated Helmet and
Display Sight System (IHADSS) of the Army Advanced Attack
Helicopter (AAH).

Contract Number: DAAK70-80-C-0168

Approved by:


M. L. Beasty
Vice President - Engineering

Approved by:


F. M. Bruno
Program Manager

Accession For	
NTIS	GRA&I
DTIC	TAB
Unannounced	
Justification	
By _____	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

Approved for public release; distribution unlimited



ABSTRACT/SUMMARY

For Phase II - Confirmatory Samples the final report on all Environmental tests except Electromagnetic Interference (EMI) was transmitted to the PCO. The EMI preliminary report was being reviewed by the COR. Accelerated life-testing (Reliability) continues.

TABLE OF CONTENTS

<u>Paragraph</u>	<u>Title</u>	<u>Page</u>
	ABSTRACT/SUMMARY	2
1.0	PURPOSE	4
2.0	GLOSSARY	5
3.0	NARRATIVE AND DATA	6
4.0	CONCLUSIONS	7
5.0	PROGRAM FOR NEXT INTERVAL	8
6.0	DISTRIBUTION LIST	9

1.0 PURPOSE

The purpose of this Manufacturing Methods and Technology (MM&T) contract is to establish production methods and facilities required to produce the Miniature Cathode Ray Tube Assembly required for the Integrated Helmet and Display Sight System (IHADSS) of the Army Advanced Attack Helicopter (AAH).

The primary objectives are to develop vendor sources for the required individual components and establish viable production techniques to meet the necessary monthly production rate.

The product produced will be required to meet the mechanical, electrical, performance, and environmental parameters of MM&T H799838.

2.0 GLOSSARY

AAH.....	Advanced Attack Helicopter
ATP.....	Acceptance Test Procedure
CCTV.....	Closed-Circuit Television
CDRL.....	Contract Data Requirements List
COR.....	Contracting Officer's Representative
CRT.....	Cathode Ray Tube
ECN.....	Engineering Change Notice
EM.....	Equipment Manufacturer
IHADSS.....	Integrated Helmet and Display Sight System
MERADCOM.....	Mobility Equipment Research and Development Command
MM&T.....	Manufacturing Methods and Technology
MOD.....	Modification (to Contract)
NV&EOL.....	Night Vision & Electro- Optics Laboratory
PCO.....	Procuring Contracting Officer
PERT.....	Program Evaluation and Review Techniques
QA.....	Quality Assurance
QC.....	Quality Control
QTP.....	Qualification Test Procedure
REL.....	Reliability (Testing)
S/N.....	Serial Number
SPEC.....	Specification
TEI.....	Thomas Electronics, Inc.
TIR.....	Total Indicated Range

3.0 NARRATIVE AND DATA

At the end of the last quarter, the final Environmental Test in Phase II - Confirmatory Samples had begun. This test was for Electro-magnetic Compatibility (EMI). For the radiated-susceptibility phase of the test, CCTV monitor resolution was improved in order to monitor potential adverse effects on the CRT assemblies. In May the tests were completed and a preliminary report was submitted to the COR for review and approval.

TEI forwarded final report for all Environmental Tests except EMI to the P.C.O.

Accelerated Confirmatory Life test (REL) continues. 1200 hrs. of data is scheduled for review during the next quarter. Decision will be then made whether to start Phase III Pilot Production Run while continuing life test to conclusion.

4.0 CONCLUSIONS

1. Preliminary Report on EMI Environmental Test is under review by COR.
2. Final Report for all Environmental Tests except EMI transmitted to PCO.
3. Accelerated Confirmatory Life Test continues.

5.0 PROGRAM FOR NEXT INTERVAL

For the next quarter, TEI's plans are as follows:

1. Continue to conclusion the REL testing required for Phase II - Confirmatory Samples.
2. Evaluate all data after 1200 hours of REL testing and determine whether to start production for Phase III - Pilot Run Assemblies.
3. Maintain detailed test records for compiling into technical data items required by the contract.
4. Prepare and submit monthly status reports and also the draft and final quarterly reports.
5. Prepare CDRL items required during Phase II and Phase III of the contract.

6.0 DISTRIBUTION LIST

<u>ADDRESSEES</u>	<u>NO. OF COPIES</u>
Hughes Aircraft Company Industrial Products Division 6155 El Camino Real ATTN: K. Fujimoto Carlsbad, CA 92008	1
Westinghouse Electric Corporation Industrial & Government Tube Division Westinghouse Circle ATTN: V. J. Muccigrosso MS210 Horseheads, NY 14845	1
Electron Tube Division Litton Industries 960 Industrial Road ATTN: James Wurtz San Carlos, CA 94070	1
Defense Documentation Center 5010 Duke Street ATTN: DDC-IRS Cameron Station (Bldg. 5) Alexandria, VA 22314	2 (Unclassified)
Director Night Vision & Electro-Optics Laboratory ATTN: DELNV-SI-SPT (Mr. Phil Deane) Fort Belvoir, VA 22060	5
Director U.S. Army Electronics & Development Command Night Vision & Electro-Optics Laboratory ATTN: DELNV-SE (M. Pablo) Fort Belvoir, VA 22060	1
EMI GENCOM INC. 80 Express Street ATTN: Mr. Fred Belasco Plainview, NY 11803	1
Naval Air Development Center ATTN: Code 6022 (Mr. J. H. Brindle) Warminster, PA 18974	1

<u>ADDRESSEES</u>	<u>NO. OF COPIES</u>
Air Force Avionics Laboratory ATTN: AFWAL/AAAT (Mr. John Mysing) Wright-Patterson AFB, OH 45433	1
Electronic Technology & Devices Laboratory ATTN: DELET-BD (Dr. Elliott Schlam) Fort Monmouth, NJ 07703	1
Rockwell International Corporation Defense Electronics Operations 3370 Miraloma Avenue ATTN: Mr. Chuck McConkle Anaheim, CA 92803	1
Hughes Aircraft Company Aerospace Groups Electro-Optical & Data Systems Group Centinela & Teale Streets ATTN: Mr. Michael Ernstoff Culver City, CA 90230	1
Honeywell Inc. 1625 Zarthan Ave. Minneapolis, MN 55416 Mail Station MN-15-2166	1
Program Manager AH-64 ATTN: DRCPM-AAH-SES-TM(Vic Liuzza) 4300 Goodfellow Blvd. St. Louis, Mo. 63120	1

84. 09 14 030

END

FILMED

10-84

DTIC